

ABSTRACT OF THE INVENTION

The invention provides isolated polypeptides that stimulate gastrointestinal smooth muscle contraction, including human prokineticin 1 and human prokineticin 2 polypeptides, and functional fragments and modifications thereof. Also provided are methods of stimulating gastrointestinal smooth muscle contraction in a mammal, by administering to the mammal an effective amount of a prokineticin polypeptide. The invention also provides nucleic acid molecules encoding a prokineticin polypeptide, and antibodies that selectively bind a prokineticin polypeptide. Further provided are methods of identifying a prokineticin receptor ligand, agonist or antagonist.